COURSE INFORMATION

CHEM 152, Fall 2015

Honors Chemistry II

Instructor: Professor R. Bruce Weisman
weisman@rice.edu
Space Sciences Building 111-D
713-348-3709

Teaching Assistant:
Mr. Eric Wagner
eew2@rice.edu

Classroom Coordinator:
Ms. Sofia Medrano
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Dell Butcher Hall 243
713-348-4027

Class Hours: Monday, Wednesday, and Friday, 10:00 – 10:50 a.m. Dell Butcher Hall room 180

Office Hours: Tuesdays 1:00 – 2:00 p.m. (or email for appointment) Space Sciences room 111-D

Discussion Sessions:
Mondays, 7:00 p.m. Space Sciences room 337

Textbook (required):
P. Atkins, L. Jones, and L. Laverman: *Chemical Principles, Sixth Edition*, Freeman, 2013.

Topics and Objectives:

CHEM 152 is a continuation of CHEM 151, an enriched course intended for students with strong prior backgrounds and/or AP credit. Students are expected to gain mastery of fundamental chemical concepts, principles, methods, and knowledge. Scheduled topics are:

Physical Equilibria	Ch. 10
Chemical Equilibria	Ch. 11
Acids and Bases	Ch. 12
Buffers and Solubility Equilibria	Ch. 13
Electrochemistry	Ch. 14
Chemical Kinetics	Ch. 15
Nuclear Chemistry	Ch. 18
Main Group Properties	Ch. 16
Transition Metal Properties	Ch. 17

Classes: We will meet on Mondays, Wednesdays, and Fridays from 10:00 to 10:50 a.m. in room 180 of Butcher Hall. Before each class, a problem based on the reading for that day will be posted on Owlspace. You will be expected to submit your answer online before class begins. As an incentive to stay current with the assigned reading, these answers will be scored and counted toward your grade. Class periods will include lecture presentations plus segments of collective problem solving. Participation in the in-class activities will also count toward your grade. As a courtesy to the instructor and your classmates, private conversations are not allowed during class.

Exams: There will be three in-class unit exams and a cumulative final exam scheduled by the Registrar. Anyone forced to miss an exam because of illness or personal emergency must contact Prof. Weisman *before* the exam.

Homework problems provide an essential tool for learning chemistry. Problem sets will be assigned nearly every week, and will be due one week after posting (normally on Wednesday). Shortly after the due date, a homework set's answer key will be posted on OwlSpace. During the period between the due date and answer key posting, homework submitted in class or placed in Prof. Weisman's mailbox (in SS 201) will be graded with a late penalty of 20%. Homework submitted after answer key posting will not be graded. However, each student's lowest homework score of the semester will be automatically dropped before computing his or her homework average.

Solving problems independently is an important skill to develop, but you can also learn much from interacting with others. So you are encouraged to form informal study groups for discussing approaches to the homework problems (but not for copying solutions from each other). We recommend that you attend the weekly discussion/help sessions led by the course's Teaching Assistant. The academic scholars in your residential college may also be available for assistance. When solving homework problems, you may refer to any books and materials except textbook solution manuals or posted solutions from prior years.

Grading

You are not competing against your classmates for grades. Everyone who learns the material well will earn an A for the course. The numerical grade cut-offs will be decided at the end of the semester. Assignments are weighted as follows:

Daily homework problems	8 %
Weekly problem sets	11 %
In-class participation	4 %
First exam	10 %
Second exam	10 %
Third exam	10 %
Final exam	22 %
Laboratory (CHEM 154)	25 %

Note that your performance scores in CHEM 152 and the CHEM 154 lab are combined to give a single grade that is reported to the Registrar for both courses.

Disabilities

Any student with a documented disability needing academic adjustments or accommodations is requested to speak with Prof. Weisman during the first two weeks of class. All such discussions will remain confidential. Students with disabilities should also contact Disabled Student Services in the Ley Student Center.

Honor Code Guidelines

ALLOWED:

You may discuss homework problems with classmates and with anyone else who will listen.

NOT ALLOWED:

For daily homework problems or weekly problem sets, you may not copy someone else's solutions or consult answer keys distributed in prior years or printed in textbook solution manuals.

For exams, you may not communicate with anyone other than Prof. Weisman while taking the exam or violate the printed instructions.